

In the Claims:

1. (Currently amended) A white-emitting LED with a defined color temperature, designed as a luminescence conversion LED, comprising:

a primary radiation source, which is a chip that emits in the blue spectral region;
[[,]] ~~with in front of it~~

a layer of two phosphors in front of said source, both of which phosphors partially convert the radiation of the chip;[[,]] ~~characterized in that~~

wherein the first phosphor is from the class of the oxynitridosilicates having a cation M and the empirical formula $M_{(1-c)}Si_2O_2N_2:D_c$, where M comprises Sr as the main constituent and D is doped with divalent Europium, $M = Sr$ or $M = Sr_{(1-x-y)}Ba_yCa_x$ with $0 \leq x+y < 0.5$ being used, the oxynitridosilicate completely or predominantly comprising the high-temperature-stable modification HT_1 [[,]] and ~~in that~~

wherein the second phosphor is a nitridosilicate of formula $(Ca,Sr)_2Si_5N_8:Eu$, producing a color temperature of from 2300 to 7000 K and at the same time achieving a color rendering of at least $Ra = 80$.

2. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~
wherein in the oxynitridosilicate the Eu fraction makes up between 0.1 and 20 mol% of M.

3. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~
wherein a proportion of M, in particular up to 30 mol%, is replaced by Ba and/or Ca and/or Zn.

4. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein a proportion of M, in particular up to 30 mol%, is replaced by Li and/or La and/or Na and/or Y.

5. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein a proportion of SiN, in particular up to 30 mol%, is replaced by AlO.

6. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein a proportion of Eu, in particular up to 30 mol%, is replaced by Mn.

7. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the chip is an InGaN chip.

8. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the LED is dimmable.

9. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the LED has a color temperature of from 2700 to 3300 K.

10. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the LED achieves the white luminous color by color mixing with the RGB principle, with the primary emission of the blue LED having a peak wavelength of from 430 to 470 nm.

11. (Currently amended) The LED as claimed in claim 10, ~~characterized in that~~ wherein the emission from the chip has a peak wavelength in the range from 450 to 465 nm.

12. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the emission of the oxynitridosilicate has a dominant wavelength λ_{dom} in the range from 550 to 570 nm.

13. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the nitridosilicate contains Sr as a permanent component, and Ca in a proportion of from 0 to 60 mol%.

14. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein the emission of the nitridosilicate has a dominant wavelength λ_{dom} in the range from 620 to 660 nm.

15. (Currently amended) The LED as claimed in claim 1, ~~characterized in that~~ wherein an Ra of at least 85 is achieved.

16. (Currently amended) An illumination system having the LED as claimed in claim 1, ~~characterized in that~~ wherein the system includes electronics for driving the individual LEDs or groups of LEDs.

17. (Currently amended) The illumination system as claimed in claim 16, ~~in~~
~~which~~ wherein the electronic control includes means which impart dimmability.